

IN THE CLAIMS:

Please amend claims 18 and 27 and add new claims 28-30 as follows.

1. (Original) A mini-packet protocol, comprising:

assembling mini-packets into a payload wherein each mini-packet includes an associated mini-header for ensuring proper processing of each mini-packet; and

adding padding to mini-packets when the mini-packets are encrypted to insure each mini-packet is an integral multiple of a predetermined block size.

2. (Original) The mini-packet protocol of claim 1 wherein padding for each min-packet is determined according to:

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$$p = n - k * \text{floor}(n-1)/k,$$

wherein p is the amount of padding added to each mini-packet, n is the actual data size, and k is the block size

3. (Original) The mini-packet protocol of claim 2 wherein the padding added to the data for each packet comprises p-1 units of padding and a final padding unit for indicating the amount of padding.

4. (Original) The mini-packet protocol of claim 3 wherein the unit is bytes.

5. (Original) The mini-packet protocol of claim 1 further comprising adding an authenticator to each mini-packet.

6. (Original) The mini-packet protocol of claim 5 further comprising setting a length indicator in each mini-header for indicating a total length of the mini-packet including the authenticator.

7. (Original) The mini-packet protocol of claim 6 further comprising removing the authenticator based upon knowing a type of authentication used for generating the authenticator.

8. (Original) The mini-packet protocol of claim 7 wherein the type of authentication comprises HMAC-SHA1 and the authenticator is 20 bytes.

9. (Previously Presented) The mini-packet protocol of claim 7 wherein the type of authentication comprises HMAC-MD5 and the authenticator is 16 bytes.

10. (Original) A mini-packet controller, comprising:
a disassembler for receiving a payload, the payload including a plurality of mini-packets, wherein the disassembler dismantles the payload into individual mini-packets;

a controller and signaling module, coupled to the disassembler, for processing the individual mini-packets, the controller further assembling the individual mini-packets into a payload wherein each mini-packet includes an associated mini-header for ensuring proper processing of each mini-packet and adding padding to mini-packets when the mini-packets are encrypted to insure each mini-packet is an integral multiple of a predetermined block size; and

an assembler for combining mini-packets into a new payload for transmission via an output port.

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11. (Original) The mini-packet controller of claim 10 wherein the padding for each mini-packet is determined according to:

$$p=n-k*\text{floor}(n-1)/k),$$

wherein p is the amount of padding added to each mini-packet, n is the actual data size, and k is the block size.

12. (Original) The mini-packet controller of claim 11 wherein the added padding for each packet comprises p-1 units of padding and a final padding unit for indicating the amount of padding.

13. (Original) The mini-packet controller of claim 12 wherein the units are bytes.

14. (Original) The mini-packet controller of claim 10 wherein the controller and signaling module adds an authenticator to each mini-packet.

15. (Original) The mini-packet controller of claim 14 wherein the controller sets a length indicator in each mini-header for indicating a total length of the mini-packet including the authenticator.

16. (Original) The mini-packet controller of claim 15 wherein the controller and signaling module removes authenticators based upon knowing a type of authentication used for generating an authenticator.

17. (Original) The mini-packet controller of claim 16 wherein the type of authentication comprises HMAC-SHA1 and the authenticator is 20 bytes.

18. (Currently Amended) The mini-packet controller of claim 16 wherein the type of authentication comprises HMAC-MD5 and ~~be~~ the authenticator is 16 bytes.

19. (Original) An article of manufacture comprising a computer readable medium having instructions for causing a computer to perform a method comprising:

assembling mini-packets into a payload wherein each mini-packet includes an associated mini-header for ensuring proper processing of each mini-packet; and

adding padding to mini-packets when the mini-packets are encrypted to insure each mini-packet is an integral multiple of a predetermined block size.

20. (Original) The mini-packet protocol of claim 19 wherein padding for each mini-packet is determined according to:

$$p=n-k*\text{floor}(n-1/k),$$

wherein p is the amount of padding added to each mini-packet, n is the actual data size, and k is the block size.

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21. (Original) The mini-packet protocol of claim 20 wherein the padding added to the data for each packet comprises p-1 units of padding and a final padding unit for indicating the amount of padding.

22. (Original) The mini-packet protocol of claim 21 wherein the unit is bytes.

23. (Original) The mini-packet protocol of claim 19 further comprising adding an authenticator to each mini-packet.

24. (Original) The mini-packet protocol of claim 23 further comprising setting a length indicator in each mini-header for indicating a total length of the mini-packet including the authenticator.

25. (Original) The mini-packet protocol of claim 24 further comprising removing the authenticator based upon knowing a type of authentication used for generating the authenticator.

26. (Original) The mini-packet protocol of claim 25 wherein types of authentication comprises HMAC-SHA1 and the authenticator is 20 bytes.

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27. (Currently Amended) The mini-packet protocol of claim 25 wherein the type of authentication comprises HMAC-MD5 and ~~be~~ the authenticator is 16 bytes.

28. (New) The mini-packet protocol of claim 1, wherein said adding step comprises adding the padding to the mini-packets, in which the padding varies from 1 to the predetermined block size.

29. (New) The mini-packet controller of claim 10, wherein the padding varies from 1 to the predetermined block size.

30. (New) The article of manufacture of claim 19, wherein said adding step comprises adding the padding to the mini-packets, in which the padding varies from 1 to the predetermined block size.